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# Observations of avalanches and precipitation in a dense network in North-Iceland

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During the summer of 2006, precipitation was measured with a network of 40 rain gauges in the region of Svarfaðardalur valley in N-Iceland. The precipitation distribution is investigated for different wind conditions and the intensity spectrum is explored. A large observed precipitation gradient (400% increase over a distance of 9 km) indicates that the orographic enhancement of precipitation may be very sensitive to the shape of the mountains and the exact aspect of the slopes. The distribution functions of precipitation intensities have similar forms for most locations, except at sea level below high mountains where low precipitation intensities are relatively infrequent while high precipitation intensities are frequent. The precipitation data are compared to information on avalanches that is retrieved from written sources and interviews. The highest values of precipitation coincide with very frequent avalanches, but there are other areas with only few avalanches but much precipitation.